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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/972,964	10/10/2001	Naoyoshi Chino	Q66482	6263

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EXAMINER

LATTIN, CHRISTOPHER W

ART UNIT PAPER NUMBER

2812

DATE MAILED: 02/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/972,964

Applicant(s)

CHINO ET AL.

Examiner

Christopher W Lattin

Art Unit

2812

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 7 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7 recites the limitation "said substantially parallel rays generating element" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 8 recites the limitation "said plurality of through-holes" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Miyakawa et al. (U.S. Patent 4,970,632).

With reference to claim 1, Miyakawa et al. teach a transfer apparatus comprising:
a light source 1; a transmission type image display device 10A in which a liquid crystal

Art Unit: 2812

layer 11 is held between two sets of substrates 15 A&B and polarizing plates 16 A&B; and a photosensitive recording medium 30; wherein the light source 1, the transmission type image display device 10A and the photosensitive recording medium 30 are arranged in series along a direction in which light from the light source advances, and a display image transmitted from the transmission type image display device is transferred to the photosensitive recording medium, and wherein the transmission type image display device and the photosensitive recording medium are arranged in a non-contact state, and a distance between the transmission type image display device and the photosensitive recording medium and a sum total of thicknesses of a substrate and a polarizing plate at least on a side of the photosensitive recording medium in the transmission type image display device are set in accordance with a definition f of the display image. See Figure 2.

With reference to claim 6, Miyakawa et al. teach the transfer apparatus according to Claim 1, further comprising a substantially parallel rays generating element arranged between the light source and the image display device.

Claims 1-3 are rejected under 35 U.S.C. 102(a) as being anticipated by Yamaguchi (JP02001188230A).

Yamaguchi et al. teach a transfer apparatus comprising: a light source 26; a transmission type image display device 10 in which a liquid crystal layer 20 is held between two sets of substrates 18 A&B and polarizing plates 22 A&B; and a photosensitive recording medium 16; wherein the light source 26, the transmission type

Art Unit: 2812

image display device 10 and the photosensitive recording medium 16 are arranged in series along a direction in which light from the light source advances, and a display image transmitted from the transmission type image display device is transferred to the photosensitive recording medium, and wherein the transmission type image display device and the photosensitive recording medium are arranged in a non-contact state, and a distance between the transmission type image display device and the photosensitive recording medium (which could be 0.1-3 mm) and a sum total of thicknesses of a substrate and a polarizing plate (which could be 1 mm or less) at least on a side of the photosensitive recording medium in the transmission type image display device are set in accordance with a definition f of the display image. See Figure 1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Funada et al. (U.S. Patent 4,486,760) in view of Kida et al. (U.S. Patent 5,321,789).

With reference to claims 1, 4, 5, 7 and 8 Funada et al. teach a transfer apparatus comprising: a light source 42; a transmission type image display device 10 in which a

Art Unit: 2812

liquid crystal layer 22 is held between two sets of substrates 14 and 16 and polarizing plates 28 and 30; and a photosensitive recording medium 12; wherein the light source 42, the transmission type image display device 10 and the photosensitive recording medium 12 are arranged in series along a direction in which light from the light source advances, and a display image transmitted from the transmission type image display device is transferred to the photosensitive recording medium, the display image and the image transferred to the photosensitive recording medium are substantially identical in size, the transmission type image display device and the photosensitive recording medium are arranged in a non-contact state, each pixel size of the image display device is 600 angstroms and a distance between the transmission type image display device and the photosensitive recording medium and a sum total of thicknesses of a substrate and a polarizing plate at least on a side of the photosensitive recording medium in the transmission type image display device are set in accordance with a definition of the display image. See Figure 1. Funada et al. fail to specifically teach that the transfer apparatus that has a substantially parallel rays generating element which comprises a porous plate having a plurality of through holes, and wherein the porous plate has a thickness not less than three times the diameter or equivalent diameter of said plurality of through-holes. Kida et al. teaches a light transfer apparatus that has a substantially parallel rays generating element which comprises a porous plate having a plurality of through holes that are parallel to each other and have a circular or polygonal cross section, wherein the porous plate has a thickness not less than three times the diameter or equivalent diameter of said plurality of through-holes in order to increase the light

Art Unit: 2812

intensity. See Figure 2. It would have been obvious to one skilled in the art at the time of the invention to include such a porous plate to increase the brightness of the light and thus enhance the image formed on the recording medium 12 of Funada et al.


Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yamaguchi (U.S. Patent 6,421,103) and Oishi et al. (U.S. Patent 4,842,379) teach related devices to that presently claimed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Lattin whose telephone number is (703) 305-3017. The examiner can normally be reached Monday through Friday from 8:00 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Niebling, can be reached at (703) 308-3325. The fax numbers for this Group are (703) 872-9318 for responses to non-final actions and (703) 872-9319 responses to final actions.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

CWL 
January 29, 2003

HANGUYEN
PRIMARY EXAMINER

